

Title (en)
SEAL COOLING

Title (de)
DICHTUNGSKÜHLUNG

Title (fr)
REFROIDISSEMENT DE LA PLAQUE D'ÉTANCHÉITÉ

Publication
EP 3309363 A3 20180530 (EN)

Application
EP 17196241 A 20171012

Priority
US 201615294923 A 20161017

Abstract (en)
[origin: EP3309363A2] Aspects of the disclosure are directed to a sealing system (300) for an engine having an axial centerline, comprising: a stationary carbon segment (224), and a seal plate (318) that rotates when the engine is operated, where the seal plate (318) includes an end face (342) that is opposed to an interface (336) between the carbon segment (224) and the seal plate (318), and where the end face (342) includes at least one groove that conveys a liquid cooling fluid.

IPC 8 full level
F01D 11/00 (2006.01); **F01D 25/12** (2006.01); **F16J 15/34** (2006.01)

CPC (source: EP US)
F01D 11/003 (2013.01 - EP US); **F01D 25/12** (2013.01 - EP US); **F01D 25/125** (2013.01 - EP US); **F16J 15/162** (2013.01 - US);
F16J 15/3404 (2013.01 - US); **F16J 15/342** (2013.01 - EP US); **F16J 15/4476** (2013.01 - EP US); **F05D 2220/32** (2013.01 - EP US);
F05D 2240/55 (2013.01 - EP US); **F05D 2260/232** (2013.01 - US); **F05D 2300/224** (2013.01 - EP US); **Y02T 50/60** (2013.01 - EP US)

Citation (search report)
• [XA] US 5639096 A 19970617 - ULLAH M RIFAT [US]
• [XA] US 2015275761 A1 20151001 - DUFFY KEVIN [US], et al
• [XA] US 2005047912 A1 20050303 - GIESLER WILLIAM L [US], et al
• [X] WO 2014133952 A1 20140904 - UNITED TECHNOLOGIES CORP [US]

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
EP 3309363 A2 20180418; EP 3309363 A3 20180530; EP 3309363 B1 20220105; EP 3995669 A1 20220511; US 10494941 B2 20191203;
US 11274564 B2 20220315; US 2018106157 A1 20180419; US 2020063585 A1 20200227

DOCDB simple family (application)
EP 17196241 A 20171012; EP 21214905 A 20171012; US 201615294923 A 20161017; US 201916670531 A 20191031